

GAU 1633

PATENT

Attorney Docket No.: A-69625-1/RFT/DLR

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

BELOTSEKOVSKII et al.

Serial No. 09/919,345

Filed: July 30, 2001

For: Enhanced Targeting of DNA  
Sequences by Recombinase Protein  
and Single-Stranded Homologous  
DNA Probes using DNA Analog  
Activation

Examiner: UNKNOWN

Group Art Unit: 1633

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INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents  
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Sir:

In satisfaction of the duty of disclosure under 37 C.F.R. § 1.56, and in accordance with the provisions of 37 C.F.R. §§ 1.97 and 1.98, Applicants wish to draw the attention of the U.S. Patent and Trademark Office to the references cited on the accompanying form PTO-1449. Copies of the references are enclosed.

None of the foregoing references is believed to disclose the invention as claimed. Nothing herein shall constitute an admission concerning the contents of any of the cited references, nor shall the inclusion of a reference herein be considered an admission that the reference constitutes prior art against the invention claimed in the above-identified application. Submission of the present document shall not be construed as an admission that a search has been made or that better art does not exist.

**Serial No.:** 09/919,345

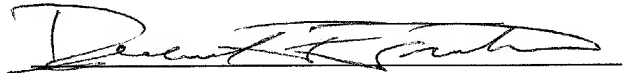
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As far as is known to the undersigned, this information disclosure statement is being filed before the mailing of a first Office action on the merits as set forth in 37 C.F.R. § 1.97(b), and therefore no fee is required. Although no fee is currently believed to be due, the Commissioner is authorized to charge any fees which may be required, or credit any overpayment to Deposit Account No. 06-1300 (Our Order No. A-69625-1/RFT/DLR).

Respectfully submitted,

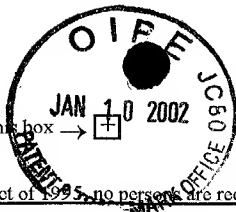
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Dated: Nov 19, 2001



Richard F. Trecartin  
Reg. No. 31,801

Four Embarcadero Center  
Suite 3400  
San Francisco, CA 94111-4187  
Telephone: (415) 781-1989



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		<b>Application Number</b>	09/919,345		
		<b>Filing Date</b>	July 30, 2001		
		<b>First Named Inventor</b>	BELOTSEKOVSKII, BORIS		
		<b>Group Art Unit</b>	1633		
		<b>Examiner Name</b>			
<b>Sheet</b>	1	<b>of</b>	1	<b>Attorney Docket Number</b>	A-69625-1/RFT/DLR

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	A1	Bukanov, N.O., et al., "PD-loop: a complex of duplex DNA with an oligonucleotide," <i>Proc Natl Acad Sci U S A</i> 1998 May 12;95(10):5516-20	
	A2	Cherny, D.Y., et al., "DNA unwinding upon strand-displacement binding of a thymine-substituted polyamide to double-stranded DNA," <i>Proc Natl Acad Sci U S A</i> 1993 Mar 1;90(5):1667-70	
	A3	Demidov, V.V., et al., "Kinetics and mechanism of polyamide ("peptide") nucleic acid binding to duplex DNA," <i>Proc Natl Acad Sci U S A</i> 1995 Mar 28;92(7):2637-41	
	A4	Faruqi, A.F. et al., "Peptide nucleic acid-targeted mutagenesis of a chromosomal gene in mouse cells," <i>Proc Natl Acad Sci U S A</i> 1998 Feb 17;95(4):1398-403	
	A5	Iyer, M., et al., "Accelerated hybridization of oligonucleotides to duplex DNA," <i>J Biol Chem.</i> 1995 Jun 16;270(24):14712-7	
	A6	Kurakin, A., et al., "Cooperative strand displacement by peptide nucleic acid (PNA)," <i>Chem Biol.</i> 1998 Feb;5(2):81-9	
	A7	Lohse, J., et al., "Double duplex invasion by peptide nucleic acid: a general principle for sequence-specific targeting of double-stranded DNA," <i>Proc Natl Acad Sci U S A</i> 1999 Oct 12;96(21):11804-8	
	A8	Malkov, V.A., et al., "Radioprobng of a RecA-three-stranded DNA complex with iodine 125: evidence for recognition of homology in the major groove of the target duplex," <i>J Mol Biol.</i> 2000 Jun 9;299(3):629-40	
	A9	Nielsen, P.E., et al., "Sequence-selective recognition of DNA by strand displacement with a thymine-substituted polyamide," <i>Science</i> 1991 Dec 6;254(5037):1497-500	
	A10	Nielsen, P.E., "Applications of peptide nucleic acids," <i>Curr Opin Biotechnol.</i> 1999 Feb;10(1):71-5	
	A11	Nielsen, P.E., "Peptide nucleic acids as therapeutic agents," <i>Curr Opin Struct Biol.</i> 1999 Jun;9(3):353-7	
	A12	Pati, S., et al., "Sequence-Specific DNA Targeting," in <i>Encyclopedia of Cancer, vol. III</i> , Academic Press, Inc. 1997 pp. 1601-1625	
	A13	Reddy, G., et al., "Joints made by RecA protein in the interior of linear duplex DNA: effects of single-stranded ends, length of homology, and dynamic state," <i>Biochemistry</i> 1994 Sep 27;33(38):11486-92	
	A14	Vega, M.A., editor, "Gene Targeting" CRC Press: Boca Raton, Ann Arbor, London, Tokyo 1994 pp. 196-197	
	A15	Veselkov, A.G., et al., "A new class of genome rare cutters," <i>Nucleic Acids Res.</i> 1996 Jul 1;24(13):2483-7	
	A16	Zelphati, O., et al., "PNA-dependent gene chemistry: stable coupling of peptides and oligonucleotides to plasmid DNA," <i>Biotechniques</i> 2000 Feb;28(2):304-10, 312-4, 316	

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